

IN THE CLAIMS:

1-27. (Previously Cancelled)

28. (Currently Amended) A method of modifying a polymeric material ~~comprising the steps of~~
~~(1) an activation treatment and (2) a hydrophilic polymer treatment, which comprises:~~

(a) subjecting the polymeric material to an activation step; and

(b) treating the activated polymeric material produced in said activation step with
a hydrophilic polymer in the presence of a catalyst or initiator under conditions effective to
produce said modified polymer. ^{ic material}

29. (Currently Amended) The method of modifying a polymeric material according to claim 28 further comprising the step (3) of monomer grafting after step (b).

30. (Currently Amended) The method of modifying a polymeric material according to claim 28, further comprising the step of a solvent-treatment prior to the activation step ~~(1)~~.

31. (Currently Amended) The method of modifying a polymeric material according to Claim 2830, further comprising the step ~~(3) of monomer grafting~~, of a solvent-treatment prior to the activation step and a step of monomer grafting after step (b).

32. (Currently Amended) The method according to claim 28, wherein said polymeric material is a homopolymer or copolymer of one or more compounds selected from the group consisting of: olefins, vinyl compounds except olefins, vinylidene compounds ~~and other compounds having carbon-carbon double bonds~~; polyesters, polyamides, polyimides, polyurethanes, polybenzoates, poly(benzoxazole)s, poly(benzthiazole)s, poly-(p-phenylene benzbisoxazole)s, poly-(p-phenylene benzbis-thiazole)s, poly(alkyl-p-hydroxybenzoate)s, poly(benzimidazole)s, carbon ~~fiber~~ materials, polyphenols, cellulose acetate, regenerated cellulose, vinylon, ~~polychlel~~ polychlal, casein, wool, silk and hemp, ~~(or ramie, and jute)~~.

33. (Currently Amended) The method according to claim 28, wherein said polymeric material is in the form of any one of fibers, woven fabrics, knitted webs, non-woven fabrics, plates, rods, films, sheets, porous films, ~~sheets~~, members or ~~products~~ parts of molded materials in a given shape or composite materials with other materials.

34. (Original) The method according to claim 28, wherein said activation-treatment is at least one of the treatments selected from the group consisting of an ozone treatment, a plasma treatment, a UV irradiation treatment and a high voltage electric discharge treatment.

62 35. (Currently Amended) The method according to claim 28, wherein said hydrophilic polymer is at least one member selected from the group consisting of polyvinyl alcohol, carboxymethylcellulose, poly(hydroxy-ethyl methacrylate), poly- α -hydroxy vinylalcohol, polyacrylic acid, polyvinyl pyrrolidone, polyalkylene glycols, starche, silk fibroin, sericin, agar, gelatin, egg white and sodium arginate.

36. (Original) The method according to claim 29, wherein said monomer is a compound having a carbon-carbon double bond.

37. (Original) The method according to claim 31, wherein said monomer is a compound having a carbon-carbon double bond.

38. (Currently Amended) The method according to claim 36, wherein said monomer is at least one kind of ~~monomer or a mixture of monomers selected from the following monomers~~; acrylic acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride ~~and~~ or pyromellitic dianhydride.

39. (Currently Amended) The method according to claim 37, wherein said monomer is at least one kind of ~~monomer or a mixture of monomers selected from the following monomers~~; acrylic

acid, methacrylic acid, vinyl acetate, 2-butene acid, ethylene sulfonic acid, hydroxyalkyl acrylate, hydroxyalkyl methacrylate, acryl amide, vinyl pyridine, vinyl pyrrolidone, vinyl carbazole, maleic anhydride ~~and~~ or pyromellitic dianhydride.

40. (Currently Cancelled)

41. (Original) The method according to claim 29, wherein the step of monomer grafting is carried out in the presence of catalysts or initiators.

42. (Original) The method according to claim 29, wherein said step of monomer grafting is carried out by any one of or both of the following two methods: (1) heating in the presence of catalysts or initiators and (2) UV irradiation in the presence or absence of catalysts, initiators or photo-sensitizers.

43. (Original) The method according to claim 31, wherein said step of monomer grafting is carried out by any one of or both of the following two methods: (1) heating in the presence of catalysts or initiators and (2) UV irradiation in the presence or absence of catalysts, initiators or photo-sensitizers.

44. (Currently Amended) The method according to claim 40, wherein said initiators are at least one of compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) ~~and~~ or persulfates.

45. (Currently Amended) The method according to claim 41, wherein said initiators are at least one of compound selected from the following compounds: peroxides, cerium ammonium nitrate (IV) ~~and~~ or persulfates.

46. (Currently Amended) ~~An improved p~~ Polymeric material obtained by the ~~improvement~~ modification method according to claim ~~128~~.

47. (Currently Amended) Battery separators containing modified ~~improved~~ polymeric materials obtained by the modification ~~improvement~~ method according to claim 28 ~~1~~.

48. (Currently Amended) Wiping/cleansing materials containing modified ~~improved~~ polymeric materials obtained by the modification ~~improvement~~ method according to claim 28 ~~1~~.

49. (Currently Amended) Filter mediums containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

50. (Currently Amended) Water absorption materials containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

B2 51. (Currently Amended) Water retention materials containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

52. (Currently Amended) Materials for microorganism culture media containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

53. (Currently Amended) Composite materials containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

pp 24 54. (Currently Amended) ~~Members of w~~ ^{pp ink tank} ~~Writing~~ materials containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

55. (Currently Amended) Polymeric materials ~~improved in adhesion property~~ obtained by the ~~improvement~~ modified method according to claim 28 ~~1~~.

56. (Currently Amended) Medical/sanitary/cosmetic supplies containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

57. (Currently Amended) Synthetic papers made of ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ~~1~~.

58. (Currently Amended) Brackets for straightening of irregular teeth containing ~~improved~~
modified polymeric materials obtained by the ~~improvement~~ method according to claim 28 ±.

B2 59. (Currently Amended) Textile products for clothing or inner battings of beds/bed clothing
containing ~~improved~~ modified polymeric materials obtained by the ~~improvement~~ method
according to claim 28 ±.
